



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,844	04/30/2001	Robert E. Johnson	10004551-1	3208

7590 05/19/2004

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

BROSS, EDWARD J

ART UNIT	PAPER NUMBER
----------	--------------

2126

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/845,844

Applicant(s)

JOHNSON ET AL.

Examiner

Edward Bross

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-25 are pending in this application.

Specification

- 14
5/17/04
2. Claim 22 is objected to because of the following informalities: "The system of claim 18" should read "The system of claim 19" (i.e. claim 18 is a method claim and claim 19 is a system claim). Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5 and 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Bray et al. (6,529,905).

5. As to claim 1, Bray teaches the invention as claimed including defining structure for data to be transported from said at least one host system (12, Fig. 1) to said storage management system (10, Fig. 1) using a markup language (col. 5, lines 19-21); and

transporting said defined data from said at least one host system to said storage management system via a remote procedure call (col. 4, lines 19-21).

6. As to claim 2, Bray discloses said markup language includes a facility to define tags, as well as structural relationships between tags (These are features of the XML language used by Bray).

7. As to claim 3, Bray discloses said markup language is extensive markup language (XML) (col. 5, lines 19-21).

8. As to claim 4, Bray discloses said remote procedure call is an operating system independent remote procedure call (col. 4, lines 19-21).

9. As to claim 5, Bray discloses said remote procedure call is Java Remote Method Invocation (RMI) (col. 4, lines 19-21).

10. As to claim 7, Bray discloses said defining is performed by at least one host agent residing on said at least one host system (col. 4, lines 5-10).

Art Unit: 2126

11. As to claim 8, Bray discloses said transporting is facilitated by said at least one host agent (col. 4, lines 10-15).

12. As to claim 9, Bray discloses retrieving said data to be transported to said storage management system from at least one storage device embedded in or communicatively coupled to said at least one host system prior to defining the structure of said data to be transported (col. 5, lines 27-30).

13. As to claim 10, Bray discloses said retrieving is performed by at least one host agent residing on said at least one host system (col. 4, lines 10-11 and “node viewing” col. 6, lines 30-34).

14. As to claim 11, Bray discloses processing said defined data at said storage management system (col. 6, lines 23-28).

15. As to claim 12, Bray does not explicitly disclose parsing said defined data using a markup language, however this is a necessary step in processing the XML data.

16. Claims 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Slaughter et al. (6,643,650).

17. As to claim 19, Slaughter teaches the invention as claimed including means for obtaining discovery information (206 Fig. 18) from at least one storage-related device (204, Figure 18) of said enterprise environment;

means for defining structure of said obtained information using a markup language (XML 132 Fig. 8); and

means for transporting said obtained information from said defining means for further processing ("instantiate" Fig. 8).

18. As to claim 20, Slaughter teaches the invention as claimed including said markup language is extensive markup language (XML) (132, Fig. 8).

19. As to claim 21, Slaughter teaches the invention as claimed including said means for transporting includes Java Remote Method Invocation (RMI) (col. 15, lines 48-63).

20. As to claim 22, Slaughter discloses aid further processing includes a processing means flexible to differences between an interface of said defining means and an interface of said processing means (2002 Fig. 43).

21. As to claim 23, Slaughter teaches the invention as claimed including at least one host system;

at least one host agent process, wherein each of said at least one host agent process resides on a respective host system of said at least one host system (Fig. 7); and

a storage management system, wherein said storage management system is communicatively coupled to said at least one host system (114 Fig. 6);

wherein at least one of said at least one host agent process is operable to define device discovery information in a markup language format and transport said formatted discovery information to said storage management system via a remote procedure call (col. 75, line 60 – col. 76, line 7 and col. 15, lines 48-63).

22. As to claim 24, Slaughter teaches the invention as claimed including said markup language format is an extensive markup language (XML) format (132, Fig. 8).

23. As to claim 25, Slaughter teaches the invention as claimed including said remote procedure call is Java Remote Method Invocation (RMI) (col. 15, lines 48-63).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bray et al. (6,529,905).

Art Unit: 2126

26. As to claim 13, Bray does not disclose said parsing is performed by a standard extensive markup language (XML) parser. However, standard XML parser libraries are well known I the art.

27. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a standard XML parser in the system of Bray to reduce the time and monetary costs involved in writing an XML parser from scratch.

28. Claims 6, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bray et al. (6,529,905) in view of Slaughter et al. (6,643,650).

29. As to claim 6, Bray does not disclose said defined data is device discovery data. Slaughter discloses defined data is device discovery data (col. 75, line 60 – col. 76, line 7).

30. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the document look up mechanism of Slaughter in the system of Bray in order to allow clients to locate documents in a language independent manner (col. 7, lines 34-49).

31. As to claim 14, Bray does not disclose providing said defined data to a flexible interface of said storage management system. Slaughter discloses providing said defined data to a flexible interface of said storage management system (col. 75, lines 63-67).

Art Unit: 2126

32. As to claim 15, Bray and Slaughter do not explicitly disclose said interface is operable to accept at least a portion of said defined data corresponding to a data field of said interface that exceeds a size parameter of said corresponding data field. However, truncation of excess data is well known in the art and it would have been obvious to one of ordinary skill in the art at the time of the invention to accept a portion of data that exceeds a size parameter in order to increase the robustness of the system.

33. As to claim 16, Bray and Slaughter do not explicitly disclose said interface is operable to ignore any portion of said defined data that does not correspond to a data field of said interface. However it is well known in the art that a defining feature of XML is that unrecognized tags are ignored when processing said document.

34. As to claim 17, Bray and Slaughter do not disclose said interface is operable to insert at least one default value into a data field of said interface when information relating to said field is not provided in said defined data. However, the use of default parameters when none is specified is well known in the art and it would have been obvious to one of ordinary skill in the art at the time of the invention to use a default value in place of any omitted parameters in order to increase the robustness of the system.

35. As to claim 18, Bray does not disclose said transporting occurs in response to a request from said storage management system, said request being made after said storage management system determines a change in device information has occurred since a prior transmission of data


to said storage management system. Slaughter discloses said transporting occurs in response to a request from said storage management system, said request being made after said storage management system determines a change in device information has occurred since a prior transmission of data to said storage management system ("AdvElementChangedEvent" Fig. 21).

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Bross whose telephone number is 305-8754. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EB


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100